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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/477,608	01/04/2000	WOLFGANG HILL	IP-23	9478

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EXAMINER

ADDISON, KAREN B

ART UNIT PAPER NUMBER

2834

DATE MAILED: 11/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/477,608

Applicant(s)

HILL, WOLFGANG

Examiner

Karen B Addison

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____.

DETAILED ACTION

Allowable Subject Matter

Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Byrne (4698537). Byrne discloses in fig.1 -13 and Electric machine with at least one magnetic circuit and at least two structural groups that are moveable against each other (21,22) and separated by and air gap (col. 9 line 7-20). Wherein, the two structural groups contain at least one soft magnetic body each and partial areas of the surface lie adjacent to the air gap having inhomogeneous properties (col 14 line 10-25). Byrne also disclose, a soft – magnetic body(42) consisting a material with higher magnetizability (iron alloy) than the remaining region of the soft magnetic body(37) disposed more distant from the air gap, belonging to the same magnetic circuit and the and a soft magnetic body possessing in total, a larger cross section in direction of the flux than the sum of said teeth that are disposed toward said air gap.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2-5 rejected under 35 U.S.C. 103(a) as being unpatentable over Byrne in view of Fanning (606974A1). Byrne substantially discloses the claim invention, including the soft magnetic body having teeth wherein one part consist of grain oriented electric sheet (fig.13 col.16-40) and the other consisting of no grain. Byrne do not disclose not disclose the soft magnetic body stacked in a tangential direction and the thickness of the sheet increases as the radius increases and the magnetic body consists of electric sheet of variable thickness.

Fanning discloses in fig.6 a Laminated stator comprising: soft magnetic body stacked in a tangential direction and the thickness of the sheet increases as the radius increases and the magnetic body consists of electric sheets having a variable thickness for the purpose of providing a substantially continuous path circumferentially around the inner core. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the electric machine of Byrne with Fanning laminated stator core for the purpose of providing a continuous and uninterrupted path.

3. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Byrne in view of Fanning as applied to claim 2-5 above, and further in view of Intermadox(DE26533871).

As seen above, Byrne discloses an electric machine and Flanning discloses the at least one of the structural groups movable together. Wherein, the soft magnetic body is stacked in a tangential direction and the thickness of the sheet increases as the radius increases. Neither Byrne nor Flanning discloses a stator having at least one spooled pole segment and two non- spooled and said half pole segments abutting at least one pole segment in the yoke area to each is assign winding.

Intermadox teaches in fig.3; a stator having at least one spooled pole segment and two non- spooled and said half pole segments abutting at least one pole segment in the yoke area to each is assign winding (16) in order to generate a phase offset between adjacent poles. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the electric machine of Byrne with the teaching of the variable sheet thickness of flanning and the teaching of nonspool and spooled poles of intermadox to obtain high magnetizability.

Referring to claim 3, It also would have been obvious to one having ordinary skill in the art at the time the invention was made to use and iron alloy made of cobalt since it has been held to be within the general skill of a worker in the art to select a known material on the basis of it's suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Response to Arguments

4. Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.

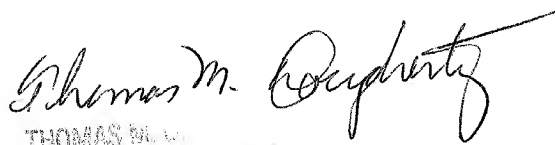
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen B Addison whose telephone number is 703-306-5855. The examiner can normally be reached on 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 703-308-1317. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3431 for regular communications and 703-305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

KBA
November 15, 2002


THOMAS M. DOUGHERTY
PRIMARY EXAMINER
GROUP 210